

PROJECT DESCRIPTION

GENERAL:

THIS PROJECT INVOLVES THE MODIFICATION OF A TRAFFIC SIGNAL ON MD 28 (DARNESTOWN ROAD /KEY WEST AVENUE) AT DARNESTOWN ROAD IN MONTGOMERY COUNTY. AN EXCLUSIVE LEFT TURN PHASE WITH FLASHING RED ARROW AND DELAYED OUTPUT DETECTION IS TO BE INSTALLED FOR WESTBOUND MD 28. AN EXCLUSIVE/PERMISSIVE RIGHT TURN PHASE IS TO BE INSTALLED FOR THE EASTBOUND MD 28. NAVIGATOR COUNTDOWN PEDESTRIAN SIGNAL HEADS ARE TO BE INSTALLED ON THE EAST AND SOUTH LEGS OF THE INTERSECTION.

MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A FOUR PHASE FULLY-ACTUATED MODE WITH THE MD 28 APPROACHES RUNNING CONCURRENTLY AND THE DARNESSTOWN ROAD APPROACH RUNNING CONCURRENTLY WITH THE THE EASTBOUND EXCLUSIVE/PERMISSIVE RIGHT TURN PHASE. EXCLUSIVE LEFT TURN PHASING WILL BE PROVIDED FOR THE WESTBOUND APPROACH OF MD 28. EXISTING VIDEO DETECTION CAMERAS SHALL ACTUATE PRESENCE AND SAMPLING DETECTION.

A PEDESTRIAN PHASE WITH COUNTDOWN AND APS WILL BE PROVIDED ACROSS DARNESTOWN ROAD. AN ALTERNATE PEDESTRIAN PHASE WITH COUNTDOWN AND APS WILL BE PROVIDED TO CROSS THE EAST LEG OF MD 28.

THE EXISTING NEMA EIGHT PHASE CONTROLLER HOUSED IN A SIZE '6' BASE-MOUNTED CABINET SHALL BE MODIFIED FOR ADDITIONAL PHASING.

SPECIAL NOTES:

THE CONTRCTOR IS RESPONSIBLE FOR CONTACTING MR. EDWARD RODENHIDER, CHIEF OF SIGNAL OPERATIONS AT 410-787-7652 TO COORDINATE THE INTERNAL WIRING OF THE EXISTING CONTROLLER /CABINET. A SEVENTY-TWO (72) HOUR PRIOR NOTICE IS REQUIRED.

PROJECT CONTACTS

THE CONTACT PERSONS FOR THE SHA ARE AS FOLLOWS:

MR. JEFFREY WENTZ
ASSISTANT DISTRICT ENGINEER
TRAFFIC
PHONE: 301-513-7358

MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER
MAINTENANCE
PHONE: 301-513-7304

MR. KEVIN NOWAK
ASSISTANT DISTRICT ENGINEER
CONSTRUCTION
PHONE: 301-513-7336

MR. AUGIE REBISH
ASSISTANT DISTRICT ENGINEER
UTILITIES
PHONE: 301-513-7350

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
PHONE: 410-787-7630

MR. KAMAL HAMUD
MCDPW&T TMC
PHONE: 240-777-8761

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9571	21 SF	SHEET ALUMINIUM SIGNS MAST ARM/POLE MOUNTED
	1 EA	R10-12(4) "LEFT LANE YIELD ON FLASHING RED ARROW AFTER STOP" (36" X 42")
	1 EA	R3-5(R) "RIGHT TURN ONLY" (30" X 36")
	4 EA	R10-4(1)MOD "COUNTDOWN PEDESTRIAN PUSHBUTTON SIGN"(9"X12")

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA.	MAINTENANCE OF TRAFFIC
8002	23 EA.	12 " RED OR GREEN LED SIGNAL HEAD SECTION
8003	12 EA.	12" YELLOW LED SIGNAL HEAD SECTION
8006	1 EA.	2 WIRE CENTRAL CONTROL UNIT
8014	4 EA.	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN
8015	3 EA.	10' PEDESTAL POLE WITH BREAKAWAY BASE
8024	4 EA.	16" COUNTDOWN LED PEDESTRIAN SIGNAL HEAD
8028	1 EA.	REMOVE AND DISPOSE OF EQUIPMENT PER ASSIGNMENT
8037	32 SF.	2' DETECTABLE WARNING SURFACE
8040	3 CY.	CONCRETE FOR SIGNAL FOUNDATION
8043	510 LF.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	1 EA.	WEATHER HEAD 3 INCH
8049	195 LF.	3" SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8052	20 LF.	3" SCHEDULE 80 RIGID PVC CONDUIT- SLOTTED
8053	140 LF.	4" SCHEDULE 80 RIGID PVC CONDUIT- BORED
8062	4 EA.	ELECTRICAL HANDHOLE
8064	21 SF.	INSTALL OVERHEAD SIGNS
8070	1 EA.	GROUND ROD (3/4 INCH DIA. X 10 FT. LENGTH)
8076	1265 LF.	ELECTRICAL CABLE 2-CONDUCTOR NO. 14 AWG
8078	1265 LF.	ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG
8079	1505 LF.	ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG

EQUIPMENT LIST "C"

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

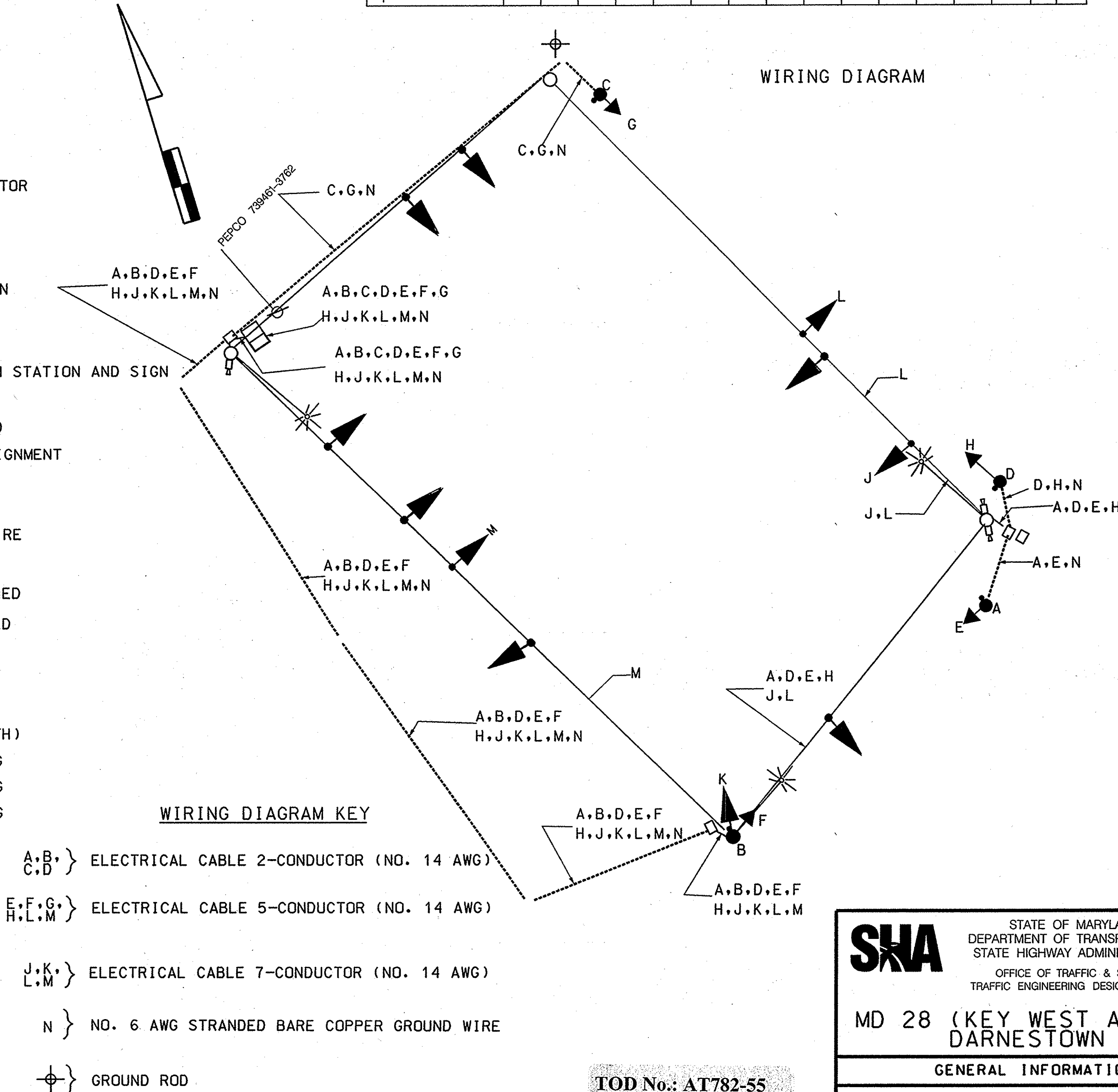
NOTE:

ALL THE PROPOSED SIGNAL HEADS REPLACING THE EXISTING SIGNAL HEADS SHALL BE WIRED WITH THE EXISTING CABLES.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Phase 2 + 5	R	R	R	G	G	G	G	R	R	R	DW	DW	DW	DW
2 Change	R	R	R	Y	Y	Y	Y	G	G	R	R	DW	DW	DW
Phase 2 + 6	G	G	G	FL/RA	FL/RA	FL/RA	G	G	R	R	WK	WK	DW	DW
Ped Clearance	G	G	G	FL/RA	FL/RA	FL/RA	G	G	R	R	FL/DW	FL/DW	DW	DW
2 + 6 Change	Y	Y	Y	R	R	R	Y	Y	R	R	DW	DW	DW	DW
Phase 4	R	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 Change	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
Phase 4 Alt.	R	R	R	R	R	R	R	G	G	G	DW	DW	WK	WK
Ped Clearance	R	R	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW
4 Alt. Change	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



A, B, C, D, E, F, G, H, J, K, L, M, N	ELECTRICAL CABLE 2-CONDUCTOR (NO. 14 AWG)
A, B, C, D, E, F, G, H, J, K, L, M, N	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)
A, B, C, D, E, F, G, H, J, K, L, M, N	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)
N	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
⊕	GROUND ROD

TOD No.: AT782-55
SHA No.: MO574A54/B54
MD 28 @ Darnestown Road

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 28 (KEY WEST AVENUE) AND
DARNESTOWN ROAD

GENERAL INFORMATION SHEET

SCALE NONE DATE 10-03-06 CONTRACT NO. AT7825185

DESIGNED BY H.O. COUNTY MONTGOMERY
DRAWN BY H.O. LOGMILE 15002818.19
CHECKED BY EMM/TH TIMS NO. H 518
FAP NO. TOD NO.

TS NO. 26400 DRAWING OF SHEET NO. 2 OF 2

REVISION '0' 25003.37

PLOTTED: SDATIMES
FILE: SPILES